

DELLA

Della cut across northern Luzon on the 27th as an intensifying tropical depression. Early signs of her existence can be traced to the central Philippine Sea near 14N 130E on the 25th as evidenced by satellite and ship data (Figure 5-47). Emerging into the South China Sea, Della was steered on a westerly track by an extension of the subtropical ridge into South China. Della developed to minimal typhoon force late on the 28th bringing the month's total to five. After her transit of Hainan Island on the 29th (Figure 5-48), Della crossed the Gulf of Tonkin on the following day arriving ashore on the Vietnamese coast late in the day near Vinh. The remains of the storm dissipated shortly thereafter over northern Laos.

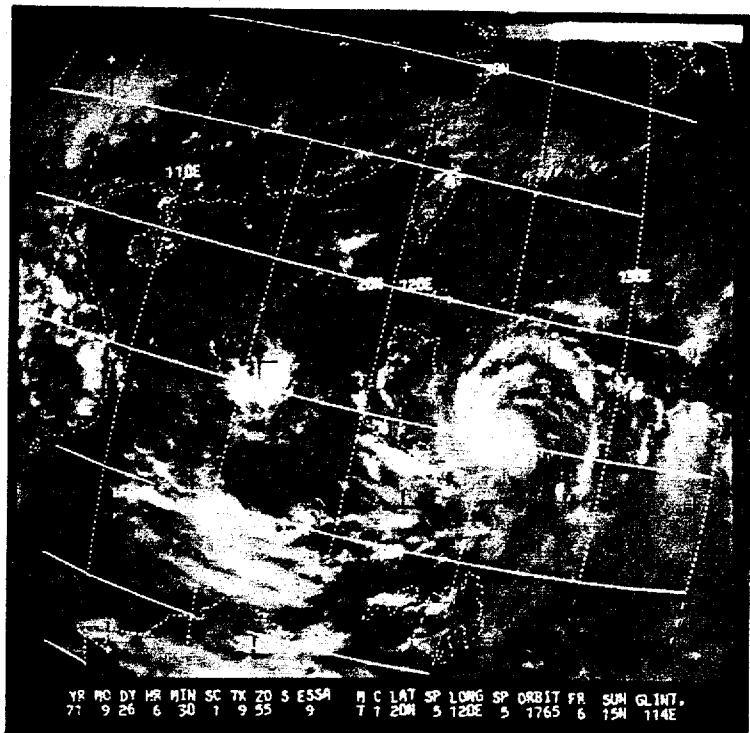


FIGURE 5-47. DELLA AS A DEVELOPING TROPICAL DEPRESSION EAST OF LUZON ON 26 SEPTEMBER.

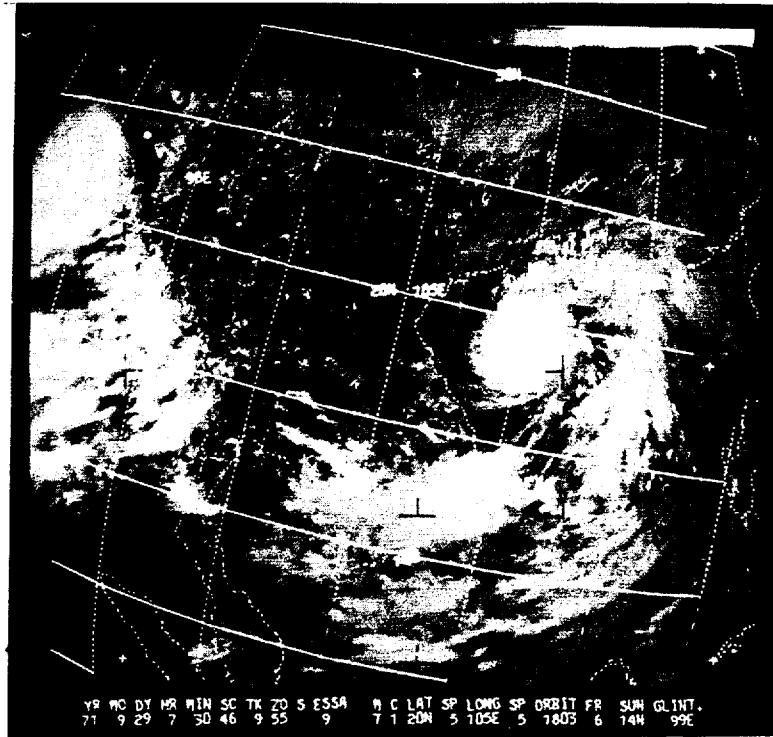


FIGURE 5-48. TYPHOON DELLA AS PHOTOGRAPHED BY ESSA-9 PRIOR TO LANDFALL ON HAINAN ISLAND ON 29 SEPTEMBER.

TYphoon DELLA
EYE FIXES FOR CYCLONE NO. 32
27 SEP - 30 SEP 71

| FIX NO. | TIME | POSIT | UNIT- METHOD -ACCY | FLT | LVL | OBS | DU MM | MIN | FLT | LVL | EYE | ORIEN- TATION | EYE DIA | THKN CLD | WALL CLS | REMARKS | POSIT OF RADAR |
|------------|---------|--------------|--------------------------|-----------|------|------|----------|------|-------|-------|------|------------------|------------|-------------|-------------|---------|----------------------|
| | | | | | | | | | | | | | | | | | FIRST BLTN |
| 1 | 260030Z | 16.0N 124.5E | SATELIT-- | STA C | --- | --- | --- | --- | --- | --- | ---- | ---- | ---- | ---- | ---- | -- | NO RDR PPRS |
| 2 | 270533Z | 17.0N 121.5E | SATELIT-- | STA C | --- | --- | --- | --- | --- | --- | ---- | ---- | ---- | ---- | ---- | -- | POOR RDR PRES |
| 3 | 271010Z | 17.0N 120.4E | 54-H- 4-15 | 500MB | 25 | ---- | ---- | ---- | ---- | 12/8 | ---- | ---- | ---- | ---- | ---- | -- | WC FIRMING F SEMIC |
| 4 | 271510Z | 17.0N 119.0E | 54-H- 5-10 | 500MB | 35 | ---- | ---- | ---- | ---- | 6/8 | ---- | ---- | ---- | ---- | ---- | -- | OPEN W SEMIC |
| 5 | 272221Z | 18.7N 117.0E | VQ-P- 3-4 | ---- | ---- | ---- | 60 | 995 | ---- | 26/24 | CIRC | 20 | ---- | ---- | ---- | -- | 19.7N 117.3E |
| 6 | 280106Z | 18.9N 117.0E | VQ-P- 3-15 | ---- | ---- | ---- | ---- | ---- | ---- | 7/8 | CIRC | 25 | ---- | ---- | ---- | -- | OPEN W SEMIC |
| 7 | 280400Z | 19.0N 116.5E | VQ-P- 3-5 | ---- | ---- | ---- | 70 | 995 | ---- | 27/23 | CIRC | 30 | ---- | ---- | ---- | -- | BETTER ORGANIZED |
| 8 | 280632Z | 19.0N 115.5E | SATELIT-- | STA A DIA | 2 | CAT | 7.0 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | -- | FAIR FIX-VHHH |
| 9 | 281015Z | 19.0N 115.0E | 54-H- 4-2 | 700MB | 65 | 65 | 987 | 2976 | 15/09 | CIRC | 15 | ---- | ---- | ---- | ---- | -- | POOR FIX-VHHH |
| 10 | 281305Z | 19.1N 114.5E | 54-P- 2-5 | 700MB | 65 | ---- | 988 | 2993 | 15/10 | CIRC | 20 | ---- | ---- | ---- | ---- | -- | CLSD WC |
| 11 | 2H1600Z | 19.1N 113.0E | 54-P- 2-2 | 700MB | 60 | ---- | 985 | 2957 | 14/08 | CIRC | 25 | ---- | ---- | ---- | ---- | -- | OPEN W SEMIC |
| 12 | 2H1610Z | 19.1N 113.5E | 54-P- 2-2 | 700MB | 60 | ---- | 981 | 2932 | 15/12 | CIRC | 25 | ---- | ---- | ---- | ---- | -- | OPEN W SEMIC |
| 13 | 2H2330Z | 19.5N 112.2E | LNU RDW-- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | -- | FAIR FIX-VHHH |
| 14 | 290300Z | 19.5N 111.5E | LNU RDW-- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | -- | POOR FIX-VHHH |
| 15 | 290731Z | 19.0N 110.7E | SATELIT-- | STA X DIA | 3 | CAT | 7.0 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | -- | 22.3N 110.2E |

TYPHOON DELIA

0000Z 27 SEP TO 1200Z 30 SEP

| BEST TRACK | | | | WARNING | | | | 24 HOUR FORECAST | | | | 48 HOUR FORECAST | | | | 72 HOUR FORECAST | | | |
|------------|--------------|-----------------|------|---------|--------------|------|--------|------------------|------|--------|--------------|------------------|--------|-------|------|------------------|--|--|--|
| POSIT | WIND | POSIT | WIND | ERRORS | POSIT | WIND | ERRORS | POSIT | WIND | ERRORS | POSIT | WIND | ERRORS | POSIT | WIND | ERRORS | | | |
| DST | WIND | DST | WIND | DST | WIND | DST | WIND | DST | WIND | DST | WIND | DST | WIND | DST | WIND | DST | | | |
| 270000Z | 17.0N 122.2E | 30 16.6N 122.2F | 40 | 24 10 | 17.6N 117.8E | 45 | 79 -10 | 18.5N 113.7E | 55 | 97 -15 | 19.5N 109.7E | 60 | 149 2n | | | | | | |
| 270600Z | 17.4N 121.0E | 25 16.8N 121.1F | 35 | 36 10 | 17.8N 116.6E | 50 | 79 -10 | 18.8N 112.6E | 60 | 97 -5 | --.- | --.- | -- | -- | -- | -- | | | |
| 271200Z | 17.8N 119.8E | 35 17.1N 120.0F | 35 | 43 0 | 18.1N 115.6E | 65 | 82 0 | 19.0N 111.5F | 75 | 109 25 | 20.0N 107.5E | 60 | 136 2e | | | | | | |
| 271800Z | 18.4N 118.5E | 45 17.6N 119.2F | 40 | 62 -5 | 18.8N 114.7E | 65 | 81 -5 | 20.0N 110.6E | 70 | 153 25 | --.- | --.- | -- | -- | -- | -- | | | |
| 280000Z | 18.8N 117.2E | 55 18.8N 117.2F | 55 | 0 0 | 21.2N 112.4E | 75 | 127 5 | 22.0N 107.3E | 40 | 197 0 | --.- | --.- | -- | -- | -- | -- | | | |
| 280600Z | 19.0N 116.0E | 60 19.3N 115.9F | 65 | 19 5 | 20.9N 110.4F | 70 | 117 5 | 22.1N 105.9E | 35 | 192 -5 | --.- | --.- | -- | -- | -- | -- | | | |
| 281200Z | 19.1N 114.6E | 65 19.2N 114.7E | 70 | 8 5 | 20.0N 110.2E | 70 | 85 20 | 20.8N 105.6F | 40 | 92 5 | --.- | --.- | -- | -- | -- | -- | | | |
| 281800Z | 19.1N 113.3E | 70 19.2N 113.3E | 70 | 6 0 | 19.8N 108.6E | 65 | 78 20 | 20.5N 104.4E | 30 | 49 5 | --.- | --.- | -- | -- | -- | -- | | | |
| 290000Z | 19.1N 112.1E | 70 19.1N 112.0E | 75 | 6 5 | 19.5N 107.0E | 55 | 49 15 | --.- | --.- | -- | -- | --.- | --.- | -- | -- | -- | | | |
| 290600Z | 19.0N 110.9E | 65 19.6N 110.9F | 65 | 36 0 | 20.2N 106.3E | 50 | 78 10 | --.- | --.- | -- | -- | --.- | --.- | -- | -- | -- | | | |
| 291200Z | 18.7N 109.6E | 50 19.1N 109.9F | 60 | 29 10 | 19.4N 105.2E | 45 | 6 10 | --.- | --.- | -- | -- | --.- | --.- | -- | -- | -- | | | |
| 291800Z | 18.5N 108.4E | 45 19.1N 108.7E | 60 | 40 15 | 19.7N 104.4E | 30 | 11 5 | --.- | --.- | -- | -- | --.- | --.- | -- | -- | -- | | | |
| 300000Z | 18.7N 107.2E | 40 19.1N 107.8E | 50 | 41 10 | --.- | --.- | -- | -- | --.- | --.- | -- | -- | --.- | --.- | -- | -- | | | |
| 300600Z | 18.9N 106.2E | 40 18.5N 106.8F | 45 | 42 5 | --.- | --.- | -- | -- | --.- | --.- | -- | -- | --.- | --.- | -- | -- | | | |
| 301200Z | 19.3N 105.2E | 35 18.5N 105.5F | 35 | 51 0 | --.- | --.- | -- | -- | --.- | --.- | -- | -- | --.- | --.- | -- | -- | | | |
| 301800Z | 19.7N 104.2E | 25 --.- | --.- | -- | --.- | --.- | -- | -- | --.- | --.- | -- | -- | --.- | --.- | -- | -- | | | |

| TYPHOONS WHILE WIND OVER 35KTS | | | | | | | | ALL FORECASTS | | | | | |
|---------------------------------|---------|-------|-------|-------|-------|---------|-------|---------------|-------|-------|--|--|--|
| | WARNING | 24-HR | 48-HR | 72-HR | | WARNING | 24-HR | 48-HR | 72-HR | | | | |
| AVERAGE FORCAST ERROR | | 29NM | 78NM | 134NM | 142NM | | 30NM | 73NM | 123NM | 142NM | | | |
| AVERAGE RIGHT ANGLE ERROR | | 21NM | 64NM | 82NM | 62NM | | 22NM | 60NM | 78NM | 62NM | | | |
| AVERAGE MAGNITUDE OF WIND ERROR | | 5KTS | 10KTS | 11KTS | 23KTS | | 5KTS | 10KTS | 11KTS | 23KTS | | | |
| AVERAGE BIAS OF WIND FRRR | | 4KTS | 5KTS | 4KTS | 23KTS | | 5KTS | 5KTS | 4KTS | 23KTS | | | |
| NUMBER OF FORECASTS | | 13 | 11 | 7 | 2 | | 15 | 12 | 8 | 2 | | | |

